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AMENDMENTS TO THE SPECIFICATION

At page 19, please replace the last paragraph comprising a portion of Table 1 with the following amended paragraph:

Table 1. Human Phagocytosis-related Genes Isolated by CHANGE

NAME	CLONE NUMBER	NUCLEIC ACID SEQ ID NO.	AMINOACID SEQ ID NO(S)	IDENTITY
PHG-1	6-29	1	~~71-79~~70-78	Unknown
PHG-2	33-25	2	~~80~~79	Prostaglandin D2 synthase
PHG-3	33-74	3	~~81~~80	Myelin basic protein
PHG-4	43-16	4	~~82-84~~81-83	Unknown
PHG-5	45-88	5	~~85~~84	Unknown

At page 20, please replace the first paragraph with the following amended paragraph, comprising the remainder of Table 1:

PHG-6	53-7	6	~~86~~85	Peanut-like 2/septin 4
PHG-7	55-26	7	~~87~~86	Coactosin-like 1
PHG-8	55-28	8	~~88~~87	Clusterin
PHG-9	57-29	9	~~89~~88	Casein kinase 1 epsilon
PHG-10	57-29	9	~~89~~88	Casein kinase 1 epsilon (duplicate)
PHG-11	73-51	10	~~90~~89	Ferritin heavy polypeptide 1
PHG-12	74-39	11	~~91~~90	Metargidin
PHG-13	78-70a	12	~~92-98~~91-97	Unknown
PHG-14	78-70c	13	~~99~~98	Retinaldehyde binding protein 1
PHG-15	80-31	14	~~100~~99	Actin gamma 1

PHG-16	91-40	15	~~101~~100	Matrix metalloproteinase, membrane-associated 1 (MT1-MMP)

At page 21, please replace the first full paragraph with the following amended paragraph, comprising Table 2:

Table 2. AMD-Related Phagogenes ("AMDP" Genes) Isolated by Iterative CHANGE Analysis

NAME	CLONE NUMBER	NUCLEIC ACID SEQ ID NO.	AMINOACID SEQ ID NO(S)	IDENTITY
AMDP-1	33-25	2	~~80~~79	Prostaglandin D2 synthase
AMDP-2	37-14	16	~~102~~101	SWI/SNF related/OSA-1 nuclear protein
AMDP-3	47-94	17	~~103-121~~102-120	Unknown
AMDP-4	57-29	9	~~89~~88	Casein kinase 1 epsilon
AMDP-5	73-51	10	~~90~~89	Ferritin heavy polypeptide 1
AMDP-6	91-40	15	~~101~~100	Matrix metalloproteinase, membrane associated 1 (MT1-MMP)

At page 21, please replace the last paragraph with the following amended paragraph:

As described above, the invention provides nucleic acid and amino acid sequences relating to genes discovered by a differential cloning strategy (CHANGE) to exhibit altered expression during RPE phagocytosis and/or in AMD. In one aspect, the invention provides novel purified nucleic acids (polynucleotides) isolated by this

strategy. Previously unknown nucleic acids of the invention include nucleic acid sequences identified herein as PHG-1 (SEQ ID NO:1); PHG-4 (SEQ ID NO. 4); PHG-5 (SEQ ID NO: 5); PHG-13 (SEQ ID NO:12); and AMDP-3 (SEQ ID NO:17). These nucleic acids encode, respectively, polypeptides having the amino acid sequences identified herein as SEQ ID NOS:~~71-79; 82-84; 85; 92-98; and 103-121~~70-78, 81-83, 84, 91-97, and 102-120.

At page 31, please replace the first paragraph with the following amended paragraph:

Agents That Modulate Expression or Activity of Phagocytosis-Related and AMDP-Related Gene Products

In another aspect, the invention provides agents that modulate expression levels of mRNA or protein of phagocytosis-related and/or AMDP-related genes. Preferred genes/proteins to be targeted for down-regulation are those showing increased expression in AMD and related disorders, including, as demonstrated herein, prostaglandin D2 synthase, PD2S (respective nucleic acid and amino acid sequences: SEQ ID NOS:2 and ~~80~~79), MT1-MMP (SEQ ID NOS:15 and ~~101~~100) and AMDP-3 (SEQ ID NOS:17 and ~~103-121~~102-120). Preferred genes/proteins to be targeted for up-regulation are those showing decreased expression in AMD and related disorders, including, as demonstrated herein, SWI/SNF related OSA-1 nuclear protein (SEQ ID NOS:16 and ~~102~~101), casein kinase 1 epsilon (SEQ ID NOS:9 and ~~89~~88) and ferritin heavy polypeptide 1(SEQ ID NOS:10 and ~~101~~89).

At page 40, please replace the second complete paragraph with the following amended paragraph:

Other embodiments of agents that can down-regulate expression or neutralize the biological activity of the phagocytosis-related and/or AMDP-related genes of the invention are based on proteins. An example of a protein that can modulate expression and/or neutralize a biological function of a phagocytosis-related and/or AMDP-related gene product is an antibody that specifically binds a phagocytosis-related and/or AMDP-related polypeptide or peptide. Preferred polypeptides, for which mRNA levels are

shown herein to be elevated in AMD, include those encoded by nucleic acids having SEQ ID NOS:2, 15 and 17, i.e., polypeptides having amino acid sequences respectively identified herein as SEQ ID NOS:~~80~~79, ~~101~~100, and ~~103-124~~102-120. The antibodies of the invention can be used to interfere with the interaction of a phagocytosis-related and/or AMDP-related protein with one or more molecules that bind or otherwise interact with the phagocytosis-related and/or AMDP-related protein. For instance, an antibody directed against MT1-MMP protein is thought to neutralize the ability of this protein to activate progelatinase A. The results of a study described herein using an antibody directed against MT1-MMP showed delay of retinal degeneration in a rat model of RPE-based disease characterized by over-expression of MT1-MMP. Accordingly, inhibition of excessive production of MT1-MMP in the interphotoreceptor matrix using an anti-MT1-MMP antibody might be used in the eyes of patients with AMD to reduce destruction of the matrix and improve phagocytosis.